

REMARKS

The present Amendment amends claims 1, 3, 11, 13, and 21-26, and leaves claims 2, 4-10, 12, and 14-20 unchanged. Therefore, the present application has pending claims 1-26.

Informal Discussion with Examiner

On page 3 of the Office Action, lines 1-3 of item 4 states, "Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Karasudani, et al." Based on a review of the rejection in its entirety, it appears that this stated rejection is an error.

In a phone call to Examiner Salad on June 2, 2006, the Examiner confirmed that claims 1-26 are not rejected under 35 U.S.C. §102(e), but rather are rejected under 35 U.S.C. §103(a) as being obvious over Karasudani, et al. in view of Kaneda, et al. Accordingly, the Examiner instructed Applicants to ignore lines 1-3 of item 4 on page 3 of the Office Action.

35 U.S.C. §103 Rejections

Claims 1-26 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent Application Publication No. 2002/0059287 to Karasudani, et al. ("Karasudani") in view of U.S. Patent Application Publication No. 2003/0204583 to Kaneda, et al. ("Kaneda"). This rejection is traversed for the following reasons.

I. Kaneda is Disqualified as Prior Art under 35 U.S.C. §103(c)

As provided in 35 U.S.C. §103(c), subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of 35 U.S.C. §102, shall not preclude patentability under 35 U.S.C. §103

where the subject matter and the claimed invention were, at the time the claimed invention was made, commonly owned, or owned by the same person or subject to an obligation of assignment to the same person. Applications and references (whether patents, patent applications, patent application publications, etc.) are to be considered by the Examiner to be owned by, or subject to an obligation of assignment to the same person, at the time the invention was made, if Applicants or an attorney or agent of record makes a statement to the effect that the application and the reference were, at the time the invention was made, owned by, or subject to an obligation of assignment to the same person. (See MPEP §706.02(I)(2)(II)). Accordingly, in response to the rejection of claims 1-26 under 35 U.S.C. §103(a) as being unpatentable over Karasudani in view of Kaneda, Applicants submit the following:

The present application (Application Serial No. 10/670,590) and U.S. Patent Application Publication No. 2003/0204583 (Application Serial No. 10/353,921) to Kaneda were, at the time the invention of Application Serial No. 10/670,590 was made, owned by Hitachi, Ltd.

As described in MPEP 706.02(I)(2)(II), this statement alone is sufficient evidence to disqualify U.S. Patent Application Publication No. 2003/0204583 (Application Serial No. 10/353,921) to Kaneda from being used in a rejection under 35 U.S.C. §103(a) against the claims of the present invention (Application Serial No. 10/670,590). Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

II. Karasudani Does Not Teach or Suggest the Present Invention

In addition to Kaneda failing to qualify as prior art, Applicants further submit that the features of the present invention, as now more clearly recited in claims 1-26, are not taught or suggested by Karasudani, whether taken individually, or in combination with each other in the manner suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims so as to more clearly describe features of the present invention. Specifically, the claims were amended to more clearly describe that the present invention is directed to a storage device, a performance guarantee method, a management method, and a network system as recited, for example, in independent claims 1, 11, 21-23, 24, and 26.

The present invention, as recited in claim 1, and as similarly recited in claims 11, 21-24, and 26, provides a storage device. The storage device includes at least one storage, an access processing module, a management interface, a storage region allocation module, and a performance allocation module. The at least one storage stores data to be accessed by the at least one computer, and the access processing module controls data access between the at least one storage and the at least one computer. The storage region allocation module allocates to the at least one computer, based on the storage region allocation request, an unallocated storage region in the at least one storage in a manner accessible by the at least one computer. The performance allocation module allocates to the at least one computer, based on the storage region allocation request, performance of at least

one target module that affects data access between the at least one computer and the storage region allocated. The prior art does not disclose all these features.

The above described features of the present invention, as now more clearly recited in the claims, are not taught or suggested by any of the references of record. Specifically, the features are not taught or suggested by either Karasudani or Kaneda, whether taken individually or in combination with each other.

Karasudani is directed to a file device and a file access method. However, there is no teaching or suggestion in Karasudani of the storage device, performance guarantee method, management method, or network system as recited, for example, in independent claims 1, 11, 21-23, 24, and 26 of the present invention.

The Karasudani file device and file access method divides a file into units of clusters or blocks and records. The objection of Karasudani is to provide a file device and a file access method such that even when there is a failure and all of the data has not recorded correctly, the data that has been recorded can be accessed. As illustrated in Fig. 3, when recording a file to an external storage device 102, which is divided among a plurality of blocks, the blocks that are to record the file are pre-allocated in the external storage device 102. Management information 113 that indicates the allocated blocks is created and the management information 113 is recorded in the external storage device 102. Next, the data that makes up the file is recorded in the external storage device 102. In this way, the blocks that are to record the file in the storage means are already allocated, and the file is recorded after recording the management information that indicates the allocated blocks in the storage means, such that even if a failure occurs during the file storage, there is no

loss of management data. Accordingly, data already recorded in the file can be read out based on the management information.

One feature of the present invention, as recited in claim 1, and as similarly recited in claims 11, 21-24, and 26, includes a management interface that receives from a management computer a storage region allocation request to allocate a storage region to the at least one computer. Contrary to the Examiner's assertions, Karasudani does not disclose this feature. To support the assertion that Karasudani discloses this feature, the Examiner cites item 113, as shown in Fig. 3, Figs. 7A-7E, and paragraph [0103]. However, neither the cited text nor the cited drawings, or any other text or drawings of Karasudani, disclose the claimed features. For example, Fig. 3, item 113 is management information, and management information is quite different from a management interface, as claimed. As described in paragraph [0067], the management information 113 is stored in the external storage device 102 and includes file management information 115 and block allocation information 116. The management information 113, which merely provides an indication of the allocated blocks, is quite different from a management interface that receives a storage region allocation request to allocate a storage region, as in the present invention. For instance, there is no disclosure in Karasudani of the management information 113 receiving a storage region allocation request, in the manner claimed.

Another feature of the present invention, as recited in claim 1, and as similarly recited in claims 11, 21-24, and 26, includes a performance allocation module that allocates to at least one computer, based on the storage region allocation request, performance of at least one target module that affects data access between the at

least one computer and the storage region allocated. As conceded by the Examiner, Karasudani does not disclose this feature.

Therefore, Karasudani fails to teach or suggest "a management interface that receives from a management computer a storage region allocation request to allocate a storage region to the at least one computer" as recited in claim 1, and as similarly recited in claim 11, 21-24, and 26.

Furthermore, Karasudani fails to teach or suggest "a performance allocation module that allocates to the at least one computer, based on the storage region allocation request, performance of at least one target module that affects data access between the at least one computer and the storage region allocated" as recited in claim 1, and as similarly recited in claims 11, 21-24 and 26.

The above noted deficiencies of Karasudani are not supplied by any of the other references, particularly Kaneda. Therefore, combining the teachings of Kaneda with Karasudani still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Karasudani suffers from deficiencies relative to the features of the present invention as recited in the claims. Furthermore, Kaneda is disqualified as prior art. Therefore, the teachings of Karasudani and Kaneda cannot be combined in the manner suggested by the Examiner to render obvious the features of the present invention, as now more clearly recited in claims 1-26. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of claims 1-26 as being unpatentable over Karasudani and Kaneda is respectfully requested.


The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references used in the rejection of claims 1-26.

In view of the foregoing amendments and remarks, Applicants submit that claims 1-26 are in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly, Stanger, Malur & Brundidge, P.C., Deposit Account No. 50-1417 (referencing attorney docket no. H-1203).

Respectfully submitted,

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